



FIG. 3A

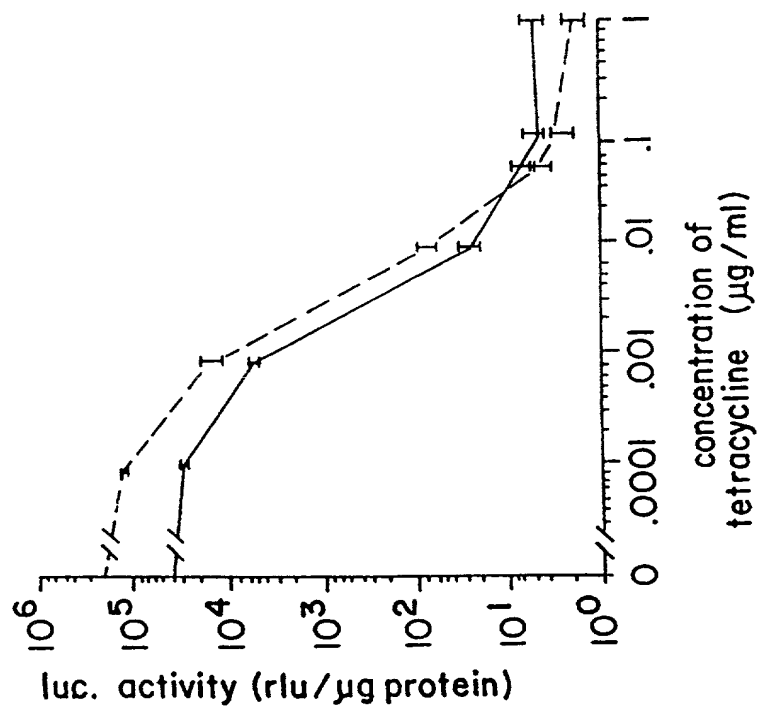
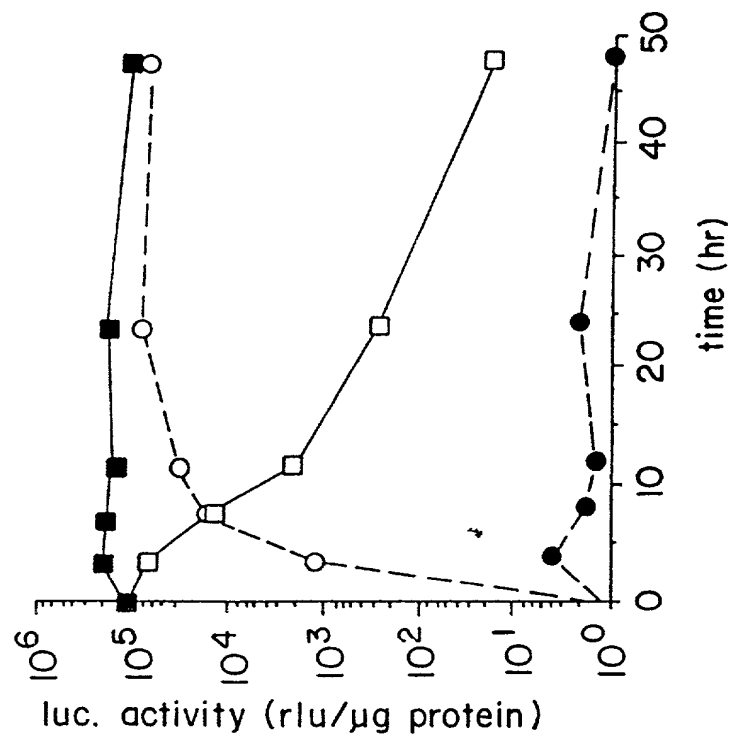


FIG. 3B



ATG TCT AGA TTA GAT AAA AGT AAA GTG ATT AAC AGC GCA TTA GAG CTG CTT AAT
Met Ser Arg Leu Asp Lys Ser Lys Val Ile Asn Ser Ala Leu Glu Leu Asn
GAG GTC GGA ATC GAA GGT TTA ACA ACC CGT AAA CTC GCC CAG AAG CTA GGT GTA
Glu Val Gly Ile Glu Gly Leu Thr Thr Arg Lys Leu Ala Gln Lys Leu Gly Val
GAG CAG CCT ACA TTG TAT TGG CAT GTA AAA AAT AAG CGG GCT TTG CTC GAC GCC
Glu Gln Pro Thr Leu Tyr Trp His Val Lys Asn Lys Arg Ala Leu Asp Ala
TTA GCC ATT GAG ATG TTA GAT AGG CAC CAT ACT CAC TTT TGC CCT TTA GAA GGG
Leu Ala Ile Glu Met Leu Asp Arg His His Thr His Phe Cys Pro Leu Glu Gly
GAA AGC TGG CAA GAT TTT TTA CGT AAT AAG GCT AAA AGT TTT AGA TGT GCT TTA
Glu Ser Trp Gln Asp Phe Leu Arg Asn Lys Ala Lys Ser Phe Arg Cys Ala Leu

*Fig. 4A*

CTA	AGT	CAT	CGC	GAT	GGA	GCA	AAA	GTA	CAT	TTA	GGT	ACA	CGG	CCT	ACA	GAA	AAA
Leu	Ser	His	Arg	Asp	Gly	Ala	Lys	Val	His	Leu	Gly	Thr	Arg	Pro	Thr	Glu	Lys
CAG	TAT	GAA	ACT	CTC	GAA	AAT	CAA	TTA	GCC	TTT	TTA	TGC	CAA	CAA	GGT	TTT	TCA
Gln	Tyr	Glu	Thr	Leu	Glu	Asn	Gln	Leu	Ala	Phe	Leu	Cys	Gln	Gln	Gly	Phe	Ser
CTA	GAG	AAT	GCA	TTA	TAT	GCA	CTC	AGC	GCT	GTG	GGG	CAT	TTT	ACT	TTA	GGT	TGC
Leu	Glu	Asn	Ala	Leu	Tyr	Ala	Leu	Ser	Ala	Val	Gly	His	Phe	Thr	Leu	Gly	Cys
GTA	TTG	GAA	GAT	CAA	GAG	CAT	CAA	GTC	GCT	AAA	GAA	GAA	AGG	GAA	ACA	CCT	ACT
Val	Leu	Glu	Asp	Gln	Glu	His	Gln	Val	Ala	Lys	Glu	Glu	Arg	Glu	Thr	Pro	Thr
ACT	GAT	AGT	ATG	CCG	CCA	TTA	TTA	CGA	CAA	GCT	ATC	GAA	TTA	TTT	GAT	CAC	CAA
Thr	Asp	Ser	Met	Pro	Pro	Leu	Leu	Arg	Gln	Ala	Ile	Glu	Leu	Phe	Asp	His	Gln

Fig. 4B

GGT	GCA	GAG	CCA	GCC	TTC	TTA	TTC	GGC	CTT	GAA	TTG	ATC	ATA	TGC	GGA	TTA	GAA
Gly	Ala	Glu	Pro	Ala	Phe	Leu	Phe	Gly	Leu	Glu	Leu	Ile	Ile	Cys	Gly	Leu	Glu
AAA	CAA	CTT	AAA	TGT	GAA	AGT	GGG	TCC	GCG	TAC	AGC	CGC	GCG	CGT	ACG	AAA	AAC
Lys	Gln	Leu	Lys	Cys	Glu	Ser	Gly	Ser	Ala	Tyr	Ser	Arg	Ala	Arg	Thr	Lys	Asn
AAT	TAC	GGG	TCT	ACC	ATC	GAG	GGC	CTG	CTC	GAT	CTC	CCG	GAC	GAC	GAC	GCC	CCC
Asn	Tyr	Gly	Ser	Thr	Ile	Glu	Gly	Leu	Leu	Asp	Leu	Pro	Asp	Asp	Asp	Ala	Pro
GAA	GAG	GCG	GGG	CTG	GCG	GCT	CCG	CGC	CTG	TCC	TTT	CTC	CCC	GCG	GGA	CAC	ACG
Glu	Glu	Ala	Gly	Leu	Ala	Ala	Pro	Arg	Leu	Ser	Phe	Leu	Pro	Ala	Gly	His	Thr
CGC	AGA	CTG	TCG	ACG	GCC	CCC	CCG	ACC	GAT	GTC	AGC	CTG	GGG	GAC	GAG	CTC	CAC
Arg	Arg	Leu	Ser	Thr	Ala	Pro	Pro	Thr	Asp	Val	Ser	Leu	Gly	Asp	Glu	Leu	His

Fig. 4C

TTA	GAC	GGC	GAG	GAC	GTG	GCG	ATG	GCG	CAT	GCC	GAC	GCG	CTA	GAC	GAT	TTC	GAT
Leu	Asp	Gly	Glu	Asp	Val	Ala	Met	Ala	His	Ala	Asp	Ala	Leu	Asp	Asp	Phe	Asp
CTG	GAC	ATG	TTG	GGG	GAC	GGG	GAT	TCC	CCG	GGT	CCG	GGA	TTT	ACC	CCC	CAC	GAC
Leu	Asp	Met	Leu	Gly	Asp	Gly	Asp	Ser	Pro	Gly	Pro	Gly	Phe	Thr	Pro	His	Asp
TCC	GCC	CCC	TAC	GGC	GCT	CTG	GAT	ATG	GCC	GAC	TTC	GAG	TTT	GAG	CAG	ATG	TTT
Ser	Ala	Pro	Tyr	Gly	Ala	Leu	Asp	Met	Ala	Asp	Phe	Glu	Phe	Glu	Gln	Met	Phe
ACC	GAT	CCC	CTT	GGA	ATT	GAC	GAG	TAC	GGT	GGG	TAG						
Thr	Asp	Pro	Leu	Gly	Ile	Asp	Glu	Tyr	Gly	Gly	*						

Fig. 4D

[illegible]

ATG TCT AGA TTA GAT AAA AGT AAA GTG ATT AAC AGC GCA TTA GAG CTG CTT AAT  
Met Ser Arg Leu Asp Lys Ser Lys Val Ile Asn Ser Ala Leu Glu Leu Leu Asn

GAG GTC GGA ATC GAA GGT TTA ACA ACC CGT AAA CTC GCC CAG AAG CTA GGT GTA  
Glu Val Gly Ile Glu Gly Leu Thr Thr Arg Lys Leu Ala Gln Lys Leu Gly Val

GAG CAG CCT ACA TTG TAT TGG CAT GTA AAA AAT AAG CGG GCT TTG CTC GAC GCC  
Glu Gln Pro Thr Leu Tyr Trp His Val Lys Asn Lys Arg Ala Leu Leu Asp Ala

TTA GCC ATT GAG ATG TTA GAT AGG CAC CAT ACT CAC TTT TGC CCT TTA GAA GGG  
Leu Ala Ile Clu Met Leu Asp Arg His His Thr His Phe Cys Pro Leu Glu Gly

GAA AGC TGG CAA GAT TTT TTA CGT AAT AAC GCT AAA AGT TTT AGA TGT GCT TTA  
Glu Ser Trp Gln Asp Phe Leu Arg Asn Asn Ala Lys Ser Phe Arg Cys Ala Leu

**Fig. 5A**



CTA	AGT	CAT	CGC	GAT	GGA	GCA	AAA	GTA	CAT	TTA	GGT	ACA	CGG	CCT	ACA	GAA	AAA
Leu	Ser	His	Arg	Asp	Gly	Ala	Lys	Val	His	Leu	Gly	Thr	Arg	Pro	Thr	Glu	Lys
CAG	TAT	GAA	ACT	CTC	GAA	AAT	CAA	TTA	GCC	TTT	TTA	TGC	CAA	CAA	GGT	TTT	TCA
Gln	Tyr	Glu	Thr	Leu	Glu	Asn	Gln	Leu	Ala	Phe	Leu	Cys	Gln	Gln	Gly	Phe	Ser
CTA	GAG	AAT	GCA	TTA	TAT	GCA	CTC	AGC	GCT	GTG	GGG	CAT	TTT	ACT	TTA	GGT	TGC
Leu	Glu	Asn	Ala	Leu	Tyr	Ala	Leu	Ser	Ala	Val	Gly	His	Phe	Thr	Leu	Gly	Cys
GTA	TTG	GAA	GAT	CAA	GAG	CAT	CAA	GTC	GCT	AAA	GAA	GAA	AGG	GAA	ACA	CCT	ACT
Val	Leu	Glu	Asp	Gln	Glu	His	Gln	Val	Ala	Lys	Glu	Glu	Arg	Glu	Thr	Pro	Thr
ACT	GAT	AGT	ATG	CCG	CCA	TTA	TTA	CGA	CAA	GCT	ATC	GAA	TTA	TTT	GAT	CAC	CAA
Thr	Asp	Ser	Met	Pro	Pro	Leu	Leu	Arg	Gln	Ala	Ile	Glu	Leu	Phe	Asp	His	Gln

*Fig. 5B*

GGT	GCA	GAG	CCA	GCC	TTC	TTA	TTC	GGC	CTT	GAA	TTG	ATC	ATA	TGC	GGA	TTA	GAA
Gly	Ala	Glu	Pro	Ala	Phe	Leu	Phe	Gly	Leu	Glu	Leu	Ile	Ile	Cys	Gly	Leu	Glu
AAA	CAA	CTT	AAA	TGT	GAA	AGT	GGG	TCT	GAT	CCA	TCG	ATA	CAC	ACG	CGC	AGA	CTG
Lys	Gln	Leu	Lys	Cys	Glu	Ser	Gly	Ser	Asp	Pro	Ser	Ile	His	Thr	Arg	Arg	Leu
TCG	ACG	GCC	CCC	CCG	ACC	GAT	GTC	AGC	CTG	GGG	GAC	GAG	CTC	CAC	TTA	GAC	GGC
Ser	Thr	Ala	Pro	Pro	Thr	Asp	Val	Ser	Leu	Gly	Asp	Glu	Leu	His	Leu	Asp	Gly
GAG	GAC	GTG	GCG	ATG	GCG	CAT	GCC	GAC	GCG	CTA	GAC	GAT	TTC	GAT	CTG	GAC	ATG
Glu	Asp	Val	Ala	Met	Ala	His	Ala	Asp	Ala	Leu	Asp	Asp	Phe	Asp	Leu	Asp	Met
TTG	GGG	GAC	GGG	GAT	TCC	CCG	GGT	CCG	GGA	TTT	ACC	CCC	CAC	GAC	TCC	GCC	CCC
Leu	Gly	Asp	Gly	Asp	Ser	Pro	Gly	Pro	Gly	Phe	Thr	Pro	His	Asp	Ser	Ala	Pro

Fig. 5C

CTT GGA ATT GAC GAG TAC GGT GGG TTC TAG  
Leu Gly Ile Asp Glu Tyr Gly Gly Phe \*

**Fig 5D**

GAATTCCCTCGAGTTTACCCTATCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCCTC  
CCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCCTATCCCTATCAGTGATAGAGAAAAGT  
GAAAGTCGAGTTTACCCTATCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCCTCCC  
TATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCCTATCCCTATCAGTGATAGAGAAAAGTGA  
AAGTCGAGTTTACCCTATCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGCTCGGTACCCGGGT  
CGAGTAGGCGTGACGGTGGGAGGCCCTATATAAGCAGAGCTCGTTTAGTGAAACCGTCAGATCGC  
CTGGAGACGCCATCCACGCTGTTTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCCTCCGC  
GG

*Fig. 6*

GAATTCCCTCGACCCGGGTACCGAGCTCGACTTTCACCTTTTCTCTATCACTGATAGGGAGTGGTA  
AACTCGACTTTCACCTTTTCTCTATCACTGATAGGGAGTGGTAAACTCGACTTTCACCTTTTCTCT  
ATCACTGATAGGGAGTGGTAAACTCGACTTTCACCTTTTCTCTATCACTGATAGGGAGTGGTAAA  
CTCGACTTTCACCTTTTCTCTATCACTGATAGGGAGTGGTAAACTCGACTTTCACCTTTTCTCTAT  
CACTGATAGGGAGTGGTAAACTCGACTTTCACCTTTTCTCTATCACTGATAGGGAGTGGTAAACT  
CGAGTAGGCGGTACGGTGGGAGGCCCTATATAAGCAGAGCTCGTTTAGTGAACCCGTCAGATCGC  
CTGGAGACGCCATCCACGCTGTTTGTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGC  
GG

*Fig. 7*

GAGCTCGACTTTCACCTTTTCTCTATCACTGATAGGAGTGGTAAACTCGACTTTCACCTTTTCTC  
TATCACTGATAGGAGTGGTAAACTCGACTTTCACCTTTTCTCTATCACTGATAGGAGTGGTAA  
ACTCGACTTTCACCTTTTCTCTATCACTGATAGGAGTGGTAAACTCGACTTTCACCTTTTCTCTA  
TCACTGATAGGAGTGGTAAACTCGACTTTCACCTTTTCTCTATCACTGATAGGAGTGGTAAAC  
TCGACTTTCACCTTTTCTCTATCACTGATAGGAGTGGTAAACTCGAGATCCGGCGAATTCGAAC  
ACGCAGATGCAGTCGGGGCGGGTCCGAGGTCCACTTCGCATATTAGGTGACGCGGTGTGG  
CCTCGAACACCGAG

*Fig. 8*

CTCGAGTTTACCACTCCCTATCAGTGTATAGAGAAAAGTGAAGTCGAGTTTACCACTCCCTATC  
AGTGTAGAGAAAAGTGAAGTCGAGTTTACCACTCCCTATCAGTGTATAGAGAAAAGTGAAGT  
CGAGTTTACCACTCCCTATCAGTGTATAGAGAAAAGTGAAGTCGAGTTTACCACTCCCTATCAG  
TGATAGAGAAAAGTGAAGTCGAGTTTACCACTCCCTATCAGTGTATAGAGAAAAGTGAAGTCG  
AGTTTACCACTCCCTATCAGTGTATAGAGAAAAGTGAAGTCGAGTCGGTACCCGGGTCGAGTA  
GGCGGTACGGTGGGAGGCCCTATATAAGCAGAGCTCGTTTAGTGAAACCGTCAGATCGCCTGGAG  
ACGCCATCCACGCTGTTTGTGACCTCCATAGAAGACACCGGACCGATCCAGCCTCCGCGGGCCCC  
GAATTCGAGCTCGGTACCGGGGCCCCCTCGAGGTCGACGGTATCGATAAGCTTGATATCGAAT  
TCCAGGAGTGGAGATCCGCGGGTCCAGCCAACCCACACCCATTTTCTCCTCCCTCTGCCCC  
TATATCCCGGACCCCCCTCCTAGCCCCCTTCCCTCCTCCCGAGAGACGGGGGAGGAGAAAAG  
GGGAGTT'AGGTCGACATGACTGAGCTGAAGGCAAGGAACCTCGGGCTCCCCACGTGGCGGGC  
GGCGGCCCTCCCCCACCGAGGTCGGATCCAGCTCCTGGGTGCCCCGGACCCCTGGCCCCCTTCC  
AGGGGAGCCAGACCTCAGAGGCCCTCGTCTGTAGTCTCCGCCCATCCCCCATCTCCCTGGACGGGTT

*Fig. 9A*

GCTCTTCCCCGGCCCTGT CAGGGCAGAACCCCCCAGACGGGAAGACGCAGGACCCACCGTCCG  
TTGTCAGACGTGGAGGGCGCATTTCTTGAGTCGAAGCCCCGGAGGGGCGAGGACAGCAGCT  
CGAGACCTCCAGAAAAGGACAGCGGCCTGCTGGACAGTGTCTCGACACGCTCCTGGGCCCTC  
GGTCCCCGGCAGAGCCACGCCAGCCCTGCCACCTGCGAGGCCATCAGCCCCGTGGTGCCTGTTT  
GGCCCCGACCTTCCCGAAGACCCCCGGGCTGCCCCCCGCTACCAAAGGGGTGTGGCCCCGCTCA  
TGAGCCGACCCGAGGACAAGGCAGGCACAGCTCTGGGACGGCAGCGGCCACAAGGTGCTGCC  
CAGGGGACTGTCACCATCCAGGCAGCTGTCTGTCTCCCCCTCTCTGGAGCCCTCACTGGCCGGCA  
GTGAAGCCATCCCCGCAGCCCCGCTGCGGTGCAGGTAGACGAGGAGACAGCTCCGAATCCGAGG  
GCACCGTGGGCCCGCTCTGAAGGCCAACCTCGGGCACTGGGAGGCACGGCGGCCGGAGGAGG  
AGCTGCCCCCGTTCGCGTCTGAGCGGCCGACGAGGCGTCTGCCCTTGTCCCCCAAGGAAGATTCT  
CGCTTCTCGGCGCCAGGGTCTCTTGCGGAGCAGGACGCGCCGGTGGCGCCTGGGCGCTCCC  
CGCTGGCCACCTCGGTGTGGATTTCATCCACGTGCCCATCCTGCCTCTCAACCACGCTTTCCT  
GGCCACCCGCAC CAGGCAGCTGTGAGGGGAGAGCTACGACGGCGGGGCCGCGGCCCGCAGC

Fig. 9B



CCCTTCG<sup>1</sup>. CCCGCAGCGGGCTCCCCCTCTGCCTCGTCCACCCCTGTGGCGGGCGACTTCC  
CCGACTGCACCTACCCGCCCGACGCGAGCCCAAAGATGACGCGTTCCCCCTCTACGGCGACTT  
CCAGCCGCCCGCCCTCAAGATAAAGGAGGAGGAAGAGCCGCGAGGCCGCGCGCTCCCCCG  
CGTACGTACCTGGTGGTGTGCAAAACCCCGCCCTTCCCGGACTTCCAGCTGGCAGCGCCGC  
CGCCACCCTCGCTGCCGCTCGAGTGCCCTCGTCCAGACCCGGGGAAGCGGCGGTGGCGGCTC  
CCCAGCAGTGCTCCGTCTCCTCGTCCGCGGTGACCCCTGGAGTGCATCCTGTAC  
AAGGCAGAGGCGGCCGCCCCAGCAGGGCCCCCTTCGCGCCGCTGCCCTGCAAGCCTCCGGCG  
CCGGCGCCTGCCTGCTCCCGCGGACGGCCCTGCCCTCCAGCTCCGCGCTCGGCGCAGCCGCCG  
GGCGGCCCTGCGCTCTACCCGACGCTCGGCCTCAACGGACTCCCGCAACTCGGCTACCAGGCC  
GCCGTGCTCAAGGAGGGCCTGCCCGCAGGTCTACACGCCCTATCTCAACTACCTGAGCGCGGATT  
CAGAAGCCAGTCAGAGCCCACAGTACAGCTTCGAGTCACTACCTCAGAAGATTGTTGATCTG  
TGGGATGAAGCATCAGGCTGTCAATTATGGTGCTCCTCACCTGTGGAGCTGTAAGTCTTCTTT  
AAAAGGCAATGGAAGGCAGCATAACTATTATGTGCTGGAAGAAATGACTGCATTGTTGATA

*Fig. 9C*

AAATCCGCAGGAAAACTGCCCGCGTGTGCCCTTAGAAAGTGTGTCAAGCTGGCATGGTCCCT  
TGGAGGGCGAAAGTTTAAAAAGTTCAATAAAGTCAGAGTCATGAGAGCACTCGATGCTGTTGCT  
CTCCACAGCCAGTGGGCAATCCAAATGAAAGCCAAACGAATCACTTTTCTCCAAGTCAAGAGA  
TACAGTTAATTCCCCCTCTAATCAACCTGTTAATGAGCATTGAAACCAGATGTGATCTATGCAGG  
ACATGACAACAAGCCTGATACCTCCAGTTCCTTGCTGACGAGTCTTAATCAACTAGGCGAG  
CGGCAACTTCTTTCAGTGGTAAAAATGGTCCAAATCTCTCCAGGTTTTCGAAACTTACATATTG  
ATGACCAGATAACTCTCATCCAGTATTCTTGGATGAGTTTAATGGTATTGGACTAGGATGGAG  
ATCCTACAACAATGTCAAGTGGGCAGATGCTGTATTTTGCACCTGATCTAATATTAATGAACAG  
CGGATGAAAGAATCATCATTTCTATTCACTATGCCTTACCATGTGGCAGATACCGCAGGAGTTTG  
TCAAGCTTCAAAGTTAGCCAAAGAAGAGTTCCTCTGCATGAAAGTATTACTACTTCTTAATACAAT  
TCCTTTTGGAAAGGACTAAGAAGTCAAAGCCAGTTTGAAGAGATGAGATCAAGCTACATTAGAGAG  
CTCATCAAGGCAATTGGTTTGAGGCAAAAAGGAGTTGTTTCCAGCTCACAGCGTTTCTATCAGC  
TCACAAAACTTCTTGATAACTTGTCATGATCTTGTCAAAACAACCTTCACTGTACTGCTGCTGAATAC

*Fig. 9D*

ATTATCCAGTCCCGGCGCTGAGTGTGAATTTCCAGAAATGATGCTGAAGTTATTGCTGCA  
CAGTACCCAAGATATTGGCAGGGATGGTGAAACCACTTCTCTTTCATAAAAAGTGAATGTCAA  
TTATTTTCAAAGAAATTAAGTGTGTGGTATGTCTTTTCGTTTGGTCAGGATTAATGACGCTCTCG  
AGTTTTTATAATATTCTGAAAGGGAATTCCTGCAGCCCGGGGATCCACTAGTTCTAGAGGATC  
CAGACATGATAAGATACATTGATGAGTTTGGACAAACCACTAGAAATGCAGTGAAAAAATG  
CTTTATTTGTGAAATTTGTGATGCTATTGCTTTATTGTAAACCATTATAAGCTGCAATAAACAA  
GTTAACAAACAATTGCATTCAATTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTT  
AAAGCAAGTAAACCTCTACAAATGTGGTATGGCTGATTATGATCCTGCAAGCCTCGTCGTCTG  
GCCGGACCACGCTATCTGTGCAAGGTCCCGGACGCGCGCTCCATGAGCAGAGCGCCCCGCC  
GAGGCAAGACTCGGGCGGCCCTGCCCGTCCCACCAAGGTCAACAGGCGGTAAACCGGCCCTTTC  
ATCGGGAAATGCGCGCGACCTTCAGCATCGCCGGCATGTCCCCTGGCGGACGGGAAGTATCAGCT  
CGACCAAGCTTGGCGAGATTTTCAGGAGCTAAGGAAGCTAAAAATGGAGAAAAAATCACTGGAT  
ATACCACCGTTGATATATCCCAATGGCATCGTAAAGAACATTTTGAGGCATTTTCAGTCAGTTGC

*Fig. 9E*

TCAATGTACCTATAACCAGACCGTTTCAGCTGCATTAAATGAATCGGCCAACGCGGGGAGAGGC  
GGTTTGCGTATTGGGGCGCTCTTCCGCTTCCCTCGCTCACTGACTCGCTGCGCTCGGTCTGTTCCGGC  
TGCGGCGAGCGGTATCAGCTCACTCAAAGGCGTAATACGGTTATCCACAGAAATCAGGGGATAA  
CGCAGGAAAGAAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGAACCGTAAAAAGGCCGCGTTG  
CTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGA  
GGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAAGCTCCCTCGTGCG  
CTCTCCTGTTCCGACCCCTGCCGCTTACCGGATACCTGTCCGCCCTTTCTCCCTTCGGGAAGCGTG  
GCGCTTCTCAATGCTACGCTGTAGGTATCTCAGTTCGGTGTAGTTCGTTTCGCTCCAAGCTGG  
GCTGTGTGCAGAACCCCGTTTCAGCCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGA  
GTCCAACCCGGTAAGACACGACTTATCGCCCACTGGCAGCAGCCCACTGGTAAACAGGATTAGCAGA  
GCGAGGTATGTAGGCGGTCTACAGAGTTCTTGAAGTGGTGGCCCTAACTACGGCTACACTAGAA  
GGACAGTATTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTC  
TTGATCCGGCAACAAACCCGCTGGTAGCGGTGTTTTTTTTTTGTTTGCAAGCAGCAGATTACG

*Fig. 9F*

CGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGA  
ACGAAAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCT  
TTTAAATTAAAAATGAAGTTTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGT  
TACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTCATCCATAGTTG  
CCTGACTCCCCGTCGTGTAGATAACTACGATAACGGGAGGGCTTACCATCTGGCCCCAGTGCTGC  
AATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACAGCCAGCCGGA  
AGGGCCGAGCGCAGAAGTGGTCCTGCAACTTTATCCGCCCTCCATCCAGTCTATTAAATTGTTGCC  
GGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTGGCAACGTTGTTGCCATTGCTACAGG  
CATCGTGGTGCACGCTCGTCGTTTGGTATGGCTTCATTACGCTCCGGTCCCAACGATCAAGG  
CGAGTTACATGATCCCCCATGTTGTGCAAAAAAGCGTTAGCTCCTTCGGTCCCTCCGATCGTTG  
TCAGAAAGTAAGTTGGCCGCAGTGTTATCACTCATGGTTATGCGAGCACTGCATAATTCTCTTAC  
TGTCA TGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAA  
TAGTGTATGCGGACCGAGTTGCTCTTGGCCCGCGTCAATACGGGATAATACCGGCCACATA

*Fig. 9G*

GCAGAACTTTAAAGTGCTCATATTGGAACCGTTCTTCGGGGCGAAAACTCTCAAGGATCTT  
ACCGCTGTTGAGATCCAGTTCGATGTAAACCCACTCGTGCACCCCAACTGATCTTCAGCATCTTTT  
ACTTTCACCAAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAA  
GGGCGACACGGAAATGTTGAATACTCATACTCTTCCTTTTCAATATATTGAAGCATTTATCA  
GGTTATTGTCATGAGCGGATACATATTGGAATGTATTAGAAAAATAAACAAATAGGGGT  
CCGCGCACATTTCCCGAAAAAGTGCCACCTGACGCTTAAGAAACCATTTATTATCATGACATTAA  
CCTATAAAATAGGCGTATCACGAGGCCCTTTTCGTC

*Fig. 9H*

CTCGAGTTTACCACCTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCACCTCCCTATC  
AGTGATAGAGAAAAGTGAAAGTCGAGTTTACCACCTCCCTATCAGTGATAGAGAAAAGTGAAAGT  
CGAGTTTACCACCTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTTTACCACCTCCCTATCAG  
TGATAGAGAAAAGTGAAAGTCGAGTTTACCACCTCCCTATCAGTGATAGAGAAAAGTGAAAGTCG  
AGTTTACCACCTCCCTATCAGTGATAGAGAAAAGTGAAAGTCGAGTCGGTACCCGGGTCGAGTA  
GGCGTGACGGTGGGAGGCCCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGATCGCCTGGAG  
ACGCCATCCACGCTGTTTGTGACCTCCATAGAAGACACGGGACCGATCCAGCCTCCGCGGGCCCC  
GAATTCCGCCACGACCATGACCATGACCCCTCCACACCAAGCATCTGGGATGGCCCTACTGCA  
TCAGATCCAAGGGAACGAGCTGGAGCCCTGAACCGTCCGCAGCTCAAGATCCCCCTGGAGCGG  
CCCCTGGGCGAGGTGTACCTGGACAGCAGCAAGCCCGCCGTGTACAATACTACCCCGAGGGCGCCG  
CCTACGAGTTCAAACGCCCGCGGCCGCCCAACGCGCAGGTCTACGGTCAGACCGGCCCTCCCCCTA  
CGGCCCCGGGTCTGAGGCTGCGGCGTTCGGCTCCAACGGCCCTGGGGGGTTTCCCCCCCCACTCAAC  
AGCGTGTCTCCGAGCCCGCTGATGCTACTGCACCCGCCCGCAGCTGTGCGCCTTTCCTGCAGC

*Fig. 10A*

CCCACGGCCAGCAGGTGCCCTACTACCTGGAGAACGAGCCCAGCGGCTACACGGTGGCGAGGC  
CGGCCCGCCGGCATTCTACAGGCCAAATTCAGATAATCGACGCCAGGGTGGCAGAGAAAGATTG  
GCCAGTACCAATGACAAGGGAAGTATGGCTATGGAATCTGCCAAGGAGACTCGCTACTGTGCAG  
TGTGCAATGACTATGCTTCAGGCTACCATATATGGAGTCTGGTCCTGTGAGGGCTGCAAGGCCCTT  
CTTCAAGAGAAGTATTC AAGGACATAACGACTATATGTGTCCAGCCACCAACCAGTGCACCATTT  
GATAAAAACAGGAGGAAGAGCTGCCAGGCCCTGCCGGCTCCGCCAAATGCTACGAAGTGGGAATGA  
TGAAAGGTGGGATACGAAAAGACCCGAAGAGGAGGGAGAAATGTTGAAACACAAGCGCCAGAGAGA  
TGATGGGAGGCAGGGGTGAAGTGGGTCTGTCTGGAGACATGAGAGCTGCCAACCTTTGGCCA  
AGCCCGCTCATGATCAAACGCTCTAAGAAGAACAGCCCTGGCCTTGTCCCTGACGGCCGACCAGA  
TGGTCATGGCCTTGTTGGATGCTGAGCCCCCCTACTCTATTCCGAGTATGATCCTACCAGACC  
CTTCAGTGAAGCTTCGATGATGGGCTTACTGACCAACCTGGCAGACAGGAGCTGGTTCACATG  
ATCAACTGGCGGAAGAGGGTGCCAGGCTTTGTGGATTTGACCCCTCCATGATCAGGTCCACCTTC  
TAGAATGTGCCCTGAGATCCTGATGATTGGTCTCGTCTGGCGCTCCATGAGACACCCAGT

*Fig. 10B*



GAAGCTACTGTTTGCTCCTAACTTGCTCTTGGAACAGGAACAGGAAAAATGTGTAGAGGGCATG  
GTGGAGATCTTCGACATGCTGCTGGCTACATCATCTCGGTTCCGCATGATGAATCTGCAGGGAG  
AGGAGTTTGTCCTCAAAATCTATATTGCTTAATTCTGGAGTGTAACATTTCTGTCCAG  
CACCTGAAGTCTCTGGAAGAGAAGACCATATCCACCGAGTCCCTGGACAAGATCACAGACACT  
TTGATCCACCTGATGGCCAAGGCAGGCCCTGACCCCTGCAGCAGCACCGGGCTGGCCCAGC  
TCCTCCTCATCCTCTCCACATCAGGCACATGAGTAACAAAGGCATGGAGCATCTGTACAGCAT  
GAAGTGCAAGAACGTGGTGCCCCCTCTATGACCTGCTGTGGAGATGCTGGACGCCACCGCCTA  
CATGCGCCCACTAGCCGTGGAGGGGCATCCGTGGAGGAGACGACCAAGCCACTTGGCCACTG  
CGGGCTCTACTTCATCGCATTCCTTGCAAAAGTATTACATCACGGGGGAGGCAGAGGTTTCCC  
TGCCACAGTCTGAGAGCTCCCTGGCGGAATTCGAGCTCGGTACCCGGGGATCCTCTAGAGGATC  
CAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACCTAGATGCAGTGAAAAAATG  
CTTTATTGTGAAAATTGTGATGCTATTGCTTTATTGTAAACCATTAAGCTGCAATAAACAA  
GTTAACAAACAATTGCATTCAATTTATGTTTCAGGTTTCAGGGGAGGTGTGGAGGTTTTTT

*Fig. 10C*

AAAGCAAGTAAACCTCTACAAATGTGGTATGGTGATTATGATCCTGCAAGCCTCGTCTGTG  
GCCGGACCAGCTATCTGTGCAAGTCCCCGGACGCGCGCTCCATGACAGAGCGCCCGCGCC  
GAGCAAGACTCGGGCGGCCCTGCCCCGTCCACAGGTCAACAGGCGGTAAACGGCCTCTTC  
ATCGGGAATGCGCGGACCTTCAGCATCGCCGGCATGTCCCCTGGCGGACGGGAAGTATCAGCT  
CGACCAAGCTTGGCGAGATTTTCAGGAGCTAAGGAAGCTAAATAATGGAGAAAAAATCACTGGAT  
ATACCACCGTTGATATATCCCAATGGCATCGTAAAGAACATTTTGAGGCATTTTCAGTCAGTTGC  
TCAATGTACCTATAACCAGACCGTTCAGCTGCATTAATGAATCGGCCAACGCGCGGGAGAGGC  
GGTTTGCGTATTGGGCGCTCTTCCGCTTCCCTCGCTCACTGACTCGCTGCGCTCGGTCTCGGC  
TGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAA  
CGCAGGAAAGAACATGTAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAAGGCCGTTG  
CTGGCGTTTTCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGA  
GGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCG  
CTCTCCTGTTCCGACCCCTGCGCTTACCGGATACCTGTCCGCTTCTCCTTCCGGAAGCGTG

*Fig. 10D*

GCGCTTTCATGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTTCGCTCCAAGCTGG  
GCTGTGTGCAGAACCCCGTTCAGCCCCGACCGCTGCGCCTTATCCGGTAACATATCGTCTTGA  
GTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGA  
GCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAA  
GGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTC  
TTGATCCCACAAACAAACACCGCTGTAGCGGTGGTTTTTTTGTGCAAGCAGCAGATTACG  
CGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGA  
ACGAAAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCT  
TTTAAATTAAAAATGAAGTTTAAATCAATCTAAAGTATATATGAGTAAACTTGGTCTGACAGT  
TACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTCCATCCATAGTTG  
CCTGATCCCCGTGCTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCA  
ATGATACCGGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACAGCCAGCCGGAA  
GGGCCGAGCGCAGAAGTGTCTTGCAACTTTTATCCGCCCTCCATCCAGTCTATTAAATTGTTGCCG

*Fig. 10E*

GGAAGCTA GAGTAAGTAGTTCGCCAGTTAATAGTTTGGCGCAACGTTGTTGCCATTGCTACAGGC  
ATCGTGGTGTACGCTCGTTCGTTTGGTATGGCTTCATTCAGCTCCGGTTCCTCCCAACGATCAAGGC  
GAGTTACATGATCCCCCATGTTGTGCAAAAAAGCGTTAGCTCCTTCGGTCCCTCCGATCGTTGT  
CAGAAAGTAAGTTGGCCCGCAGTGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACT  
GTCATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAAT  
AGTGTATGCGGCGACCGAGTTGCTCTTGTCCCGCGCTCAATACGGGATAATAACCGCCACACATAG  
CAGAACTTTAAAGTGCTCATATTGAAAAACGTTCTTCGGGGCGAAAACTCTCAAGGATCTTA  
CCGCTGTTGAGATCCAGTTCGATGTAAACCACTCGTGCACCCCAACTGATCTTCAGCATCTTTTA  
CTTTCAACGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAG  
GGCGACACGGAATGTTGAATACTCATACTCTTCCTTTTCAATAATATTGAAGCATTTATCAG  
GGTATTGTCTCATGAGCGGATACATAATTGGAATGTATTTAGAAAAATAAACAAATAGGGGTTTC  
CGGCACATTTCCCCGAAAAGTGCCACCTGACGTCTAAGAAACCATTTATTATCATGACATTAAAC  
CTATAAAAATAGGCGTATCACGAGGCCCTTTTCGTC

*Fig. 10F*

FIG. 11

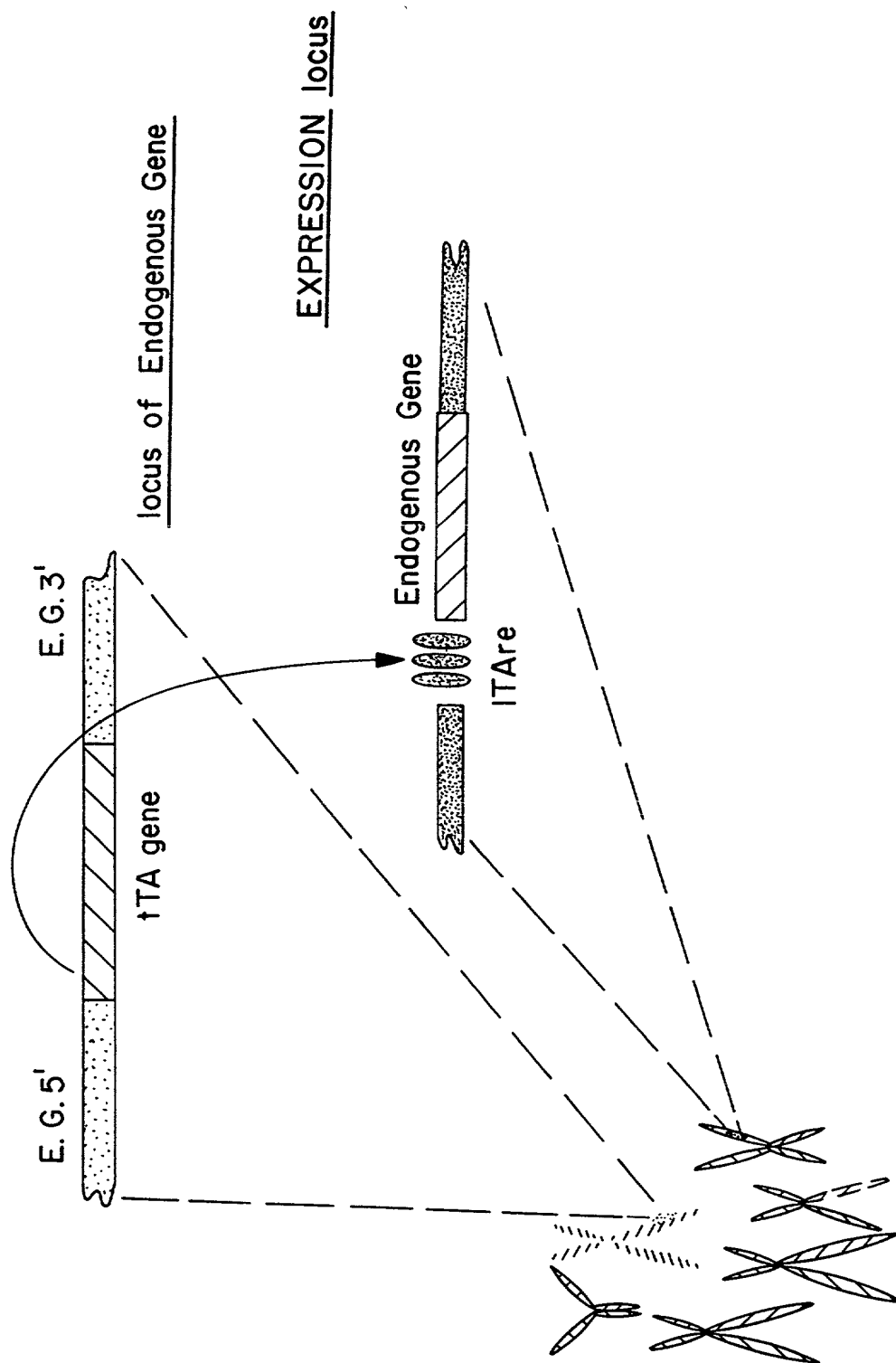


FIG. 12

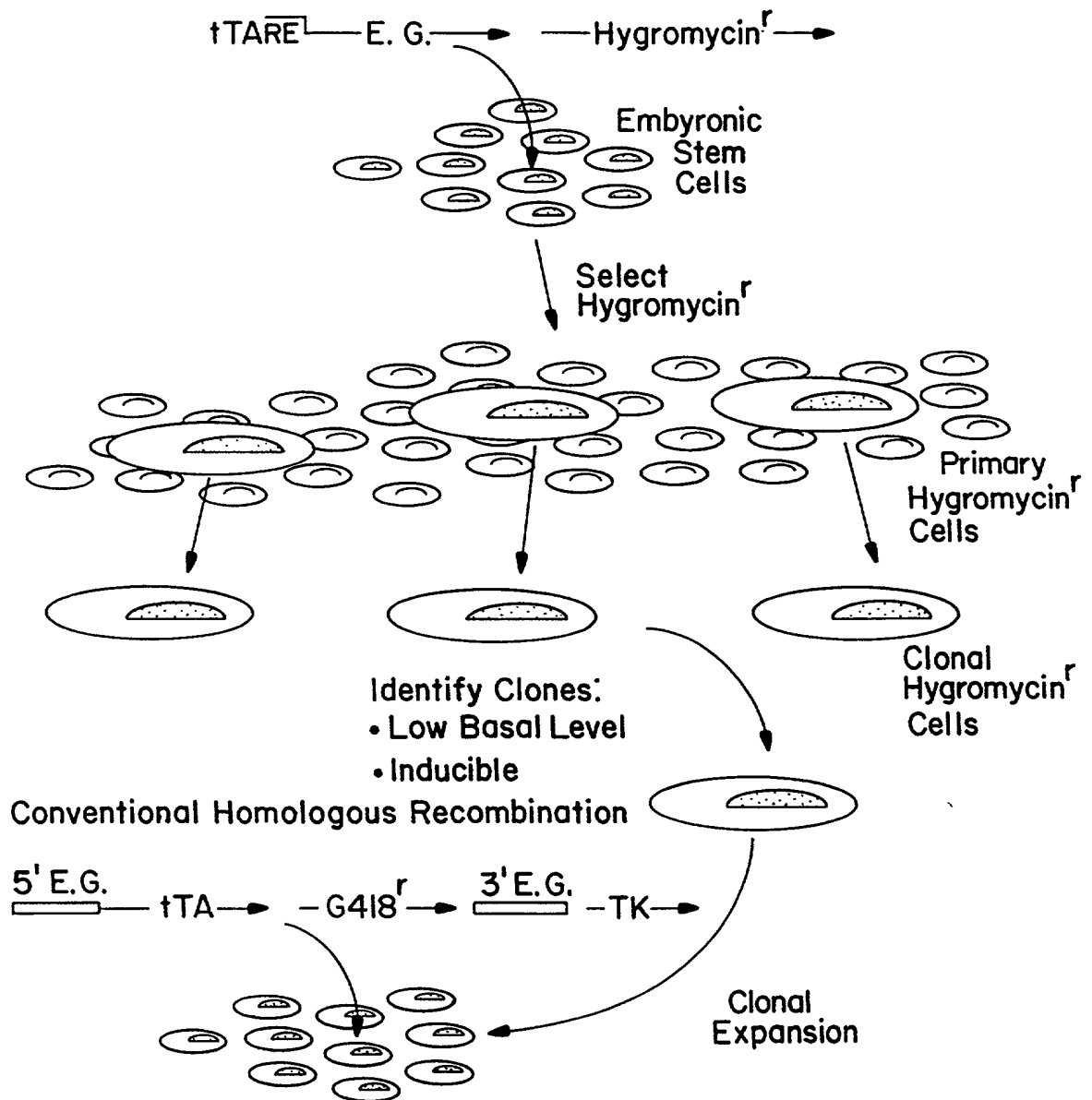


FIG. 13A

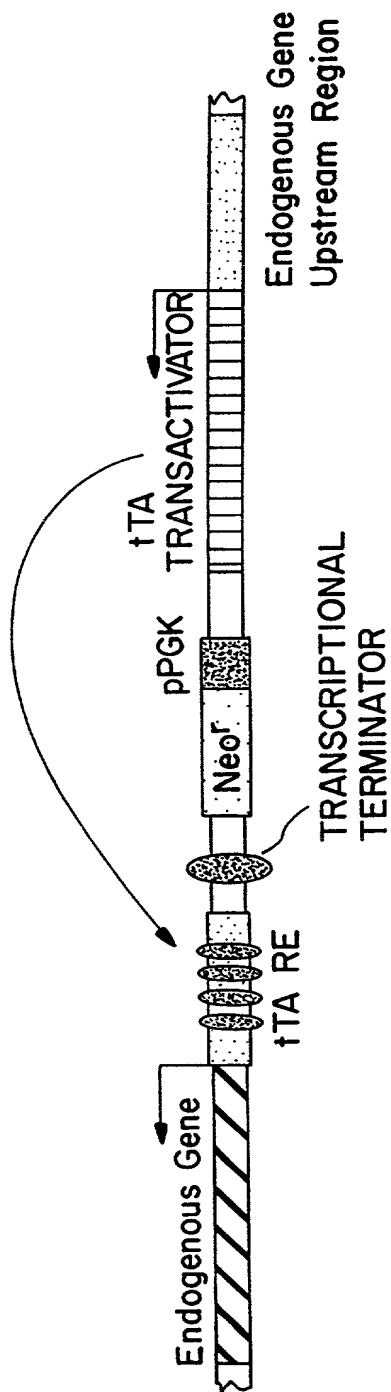
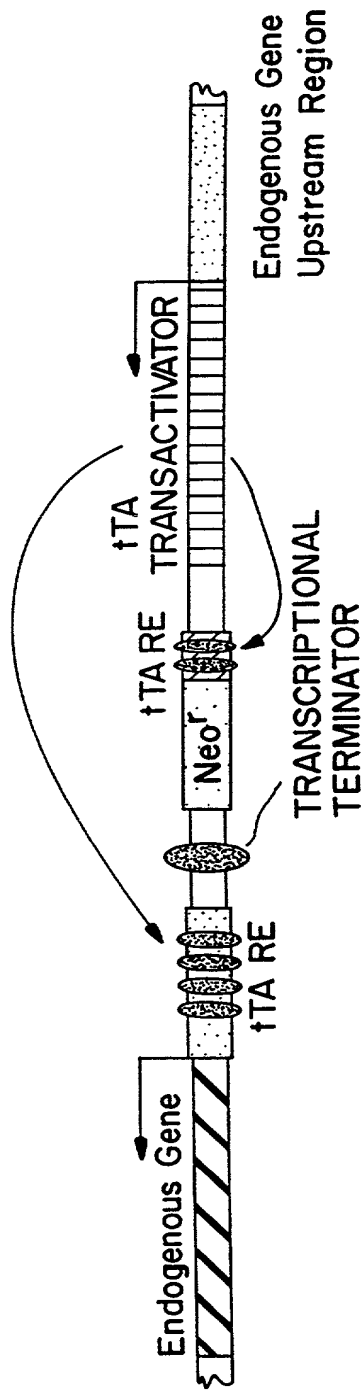


FIG. 13B



CT4/L7

FIG.14

